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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,465	10/07/2003	Randolph C. Williams	6978-253-COB	5168
27572	7590	04/15/2004	EXAMINER	
HARNES, DICKEY & PIERCE, P.L.C.			LE, DAVID D	
P.O. BOX 828			ART UNIT	PAPER NUMBER
BLOOMFIELD HILLS, MI 48303			3681	

DATE MAILED: 04/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/680,465	Applicant(s) WILLIAMS, RANDOLPH C.	
	Examiner David D. Le	Art Unit 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2003.  
 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
     4a) Of the above claim(s) 17 is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-16 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 07 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07 October 2003</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

This is the first Office action on the merits of Application No. 10/680,465, filed on 07 October 2003. Claims 1-17 are pending.

#### **Documents**

1. The following documents have been received and filed as part of the patent application:
  - Declaration and Power of Attorney, received on 10/07/03
  - Information Disclosure Statement, received on 10/07/03

#### ***Election/Restrictions***

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-16, drawn to a transfer case, classified in class 475, subclass 223.
  - II. Claim 17, drawn to a bi-directional overrunning clutch, classified in class 192, subclass 44.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the

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subcombination as claimed because the claimed bi-directional overrunning mode clutch does not require an actuation channel having a pair of spaced end segments in order to properly function in both auto and lock modes. The subcombination has separate utility such as a lockable differential gear assembly.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

3. During a telephone conversation with applicant's attorney, Phillip E. Rettig on 08 April 2004 a provisional election was made *without* traverse to prosecute the invention of I, claims 1-16. Affirmation of this election must be made by applicant in replying to this Office action. Claim 17 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 11-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claims 11-16:

- Claim 11 recites the limitation "said rear and front output shafts". There is insufficient antecedent basis for this limitation in the claim.

***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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7. Claims 1-16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-25 of U.S. Patent No. 6,629,474. Although the conflicting claims are not identical, they are not patentably distinct from each other because they claim the same structural elements and their corresponding functions.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. **Claims 1-5, 9-12, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by U. S. Patent No. 6,652,407 to Ronk et al.**

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Claims 1-5 and 9-12, and 16:

Ronk (Figs. 1-8; column 3, line 15 – column 6, line 67) discloses a transfer case comprising:

- A first and second drive lines (see Fig. 1);
- An input shaft (50);
- A reduction unit (52);
- A first output shaft (18);
- A second output shaft (32);
- A range actuator (54);
- A bi-directional overrunning mode clutch (58) including a first ring (124) driven by said first output shaft, a second ring (118), rollers (134) disposed in aligned cam tracks (130 and 132) formed in facing surfaces of said first and second rings, said second ring adapted to circumferentially index relative to said first ring to cause said rollers to ride up said cam tracks and cause said second ring to frictionally engage said second output shaft, and mode actuator (88) that is moveable between a first position and a second position to establish corresponding AUTO and LOCK modes, said overrunning clutch is operable in its AUTO mode to permit relative rotation between said first and second output shafts in a first direction and prevent relative rotation therebetween in a second direction, and said overrunning clutch is operable in is LOCK mode to prevent relative rotation between said first and second output shafts in both directions (column 5, line 63 – column 6, line 41);

- A shift mechanism (60) for controlling movement of said range actuator and said mode actuator;
- A transfer assembly (56);
- Wherein the transfer assembly includes a first sprocket (110) driven by said rear output shaft, a second sprocket (114) surrounding said second output shaft, and a power chain (116) for connecting said first sprocket to said second sprocket, said first ring of said mode clutch being coupled to said second sprocket (see Fig. 3 and column 4, line 67 – column 5, line 1);
- Wherein said second ring is a split ring (118) defining an actuation slot (125) having first and second edge surfaces (146 and 150) (see Fig. 5 and column 5, lines 2-42);
- Wherein the mode actuator has a lug (144) retained in said actuation slot of said split ring and which is moveable from a central position disengaged from said first and second edge surfaces in a first direction into engagement with said first edge surface and in a second direction into engagement with said second edge surface;
- A power-operated actuator (88) for controlling movement of said shift system (60) (see column 4, lines 19-22); and
- A controller (232).



***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

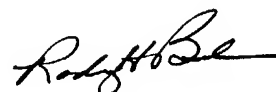
- Fogelberg (U. S. Patent No. 5,884,526) teaches an actuator for transfer case as shown in Figs. 1-3.
- Holdeman (U. S. Patent No. 4,103,753) teaches a manually shiftable planetary gearset as shown in Fig. 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 703-305-3690. The examiner can normally be reached on Mon-Fri (0700-1530).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
ddl

  
RODNEY H. BONCK  
PRIMARY EXAMINER  
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